

## LISTING OF CLAIMS

The listing of claims below replaces prior versions of claims in the application. Claims 1- 25 were originally filed. In a Preliminary Amendment, Claims 1, 8, 12, 16, 20, 22, and 23 were amended and Claims 26-37 were added. Thus, Claims 1-37 were pending at the time of the Action.

1. (Previously Amended) A computer-implemented method for processing data, the method comprising:

in an operating environment supporting a pipeline of a plurality of object-based commands, a subsequent command within the pipeline being configured to communicate with a prior command within the pipeline through a parseable object emitted from the prior command, the operating environment configured to support the execution of the commands within the same process,

receiving the parseable object emitted from the prior command, the parseable object having at least one method;

obtaining a data type for the parseable object;

obtaining format information describing a format for the data type; and

emitting a format object for access by another subsequent command, the format object being based on the format information.

2. (Original) The computer-implemented method of claim 1, wherein obtaining format information comprises accessing an XML-based document.

3. (Original) The computer-implemented method of claim 1, wherein the subsequent command comprises an output command configured to render results of the pipeline based on the received parseable object and the format object.

1           4. (Original) The computer-implemented method of claim 3, wherein  
2 the rendering of the results comprises displaying on a console.

3           5. (Original) The computer-implemented method of claim 3, wherein  
4 the rendering of the results comprises importing the results into an application.

5           6. (Original) The computer-implemented method of claim 3, wherein  
6 the rendering of the results comprises displaying in a graphical user interface.

7           7. (Original) The computer-implemented method of claim 1, wherein  
8 the other subsequent command comprises a markup command configured to add  
9 property annotation to selected parameters within the parseable object and  
10 emitting these property annotations for input by further subsequent commands in  
11 the pipeline.

12           8. (Previously Amended) The computer-implemented method of claim  
13 1, wherein the other subsequent command comprises a convert command  
14 configured to convert the received parseable object into a specific format.

15           9. (Original) The computer-implemented method of claim 8, wherein  
16 the specific format comprises an XML document, an Active Directory Object, or a  
17 comma separated value format.

18           10. (Original) The computer-implemented method of claim 8, wherein  
19 another subsequent command comprises a transform command that receives the  
20 specific format from the convert command and transforms the specific format into  
21 another specific format based on a style sheet.

22           11. (Original) The computer-implemented method of claim 1, wherein  
23 the format information describes the data type and at least one of a shape, a  
24 property, or a header.

1           12. (Previously Amended) A computer readable medium having  
2 computer-executable instructions for providing data driven output, the instructions  
3 comprising:

4           receiving a parseable object emitted from a prior command within an  
5 operating environment that supports a pipeline of a plurality of object-based  
6 commands and that is configured to support the execution of the commands within  
7 the same process, the prior command being one of the plurality of commands,

8           obtaining a data type for the parseable object, the parseable object having at  
9 least one method;

10          obtaining format information describing a format for the data type; and  
11          emitting a format object for access by a subsequent command from the  
12 plurality of commands, the format object being based on the format information.

13          13. (Original) The computer readable medium of claim 12, wherein  
14 obtaining format information comprises accessing an XML-based document.

15          14. (Original) The computer readable medium of claim 12, wherein the  
16 subsequent command comprises an output command configured to render results  
17 of the pipeline based on the received parseable object and the format object

18          15. (Original) The computer readable medium of claim 12, wherein the  
19 other subsequent command comprises a markup command configured to add  
20 property annotation to selected parameters within the parseable object and  
21 emitting these property annotations for input by further subsequent commands in  
22 the pipeline.

23          16. (Previously Amended) The computer readable medium of claim 12,  
24 wherein the other subsequent command comprises a convert command configured  
25 to convert the received parseable object into a specific format.

1 17. (Original) The computer readable medium of claim 16, wherein the  
2 specific format comprises an XML document, an Active Directory Object, or a  
3 comma separated value format.

4 18. (Original) The computer readable medium of claim 16, wherein  
5 another subsequent command comprises a transform command that receives the  
6 specific format from the convert command and transforms the specific format into  
7 another specific format based on a style sheet.

8 19. (Original) The computer readable medium of claim 12, wherein the  
9 format information describes the data type and at least one of a shape, a property,  
10 or a header.  
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1           **20.** (Previously Amended) A system that supports data driven output,  
2 the system comprising:

3           a processor;

4           a memory, the memory being allocated for a plurality of computer-  
5 executable instructions which are loaded into the memory for execution by the  
6 processor, the computer-executable instructions performing a method comprising:

7           receiving a parseable object emitted from a prior command within an  
8 operating environment that supports a pipeline of a plurality of object-based  
9 commands and that is configured to support the execution of the commands within  
10 the same process, the prior command being one of the plurality of commands,

11           obtaining a data type for the parseable object, the parseable object having at  
12 least one method;

13           obtaining format information describing a format for the data type; and

14           emitting a format object for access by a subsequent command from the  
15 plurality of commands, the format object being based on the format information.

16           **21.** (Original) The system of claim 20, wherein obtaining format  
17 information comprises accessing an XML-based document.

18           **22.** (Previously Amended) The system of claim 20, wherein the format  
19 information describes the data type and at least one of a shape, a property, or a  
20 header.

21           **23.** (Previously Amended) The system of claim 20, wherein the other  
22 subsequent command comprises a markup command configured to add property  
23 annotation to selected parameters within the parseable object and emitting these  
24 property annotations for input by further subsequent commands in the pipeline.  
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1           24. (Original) The system of claim 20, wherein the other subsequent  
2 command comprises a convert command configured to convert the received  
3 parseable stream into a specific format.

4           25. (Original) The system of claim 20, wherein another subsequent  
5 command comprises a transform command that receives the specific format from  
6 the convert command and transforms the specific format into another specific  
7 format based on a style sheet.  
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1           26. (Previously Added) A method for providing a data driven command  
2 line output, the method comprising:

3           receiving a command-line instruction containing an output command  
4 configured to receive at least one object, the object having at least one method;  
5 and

6           executing the output command to manipulate the at least one object and to  
7 output a result to an output destination.

8           27. (Previously Added) The method of claim 26, wherein the command  
9 line instruction is received and the output command is executed in an object-based  
10 command-line environment.

11           28. (Previously Added) The method of claim 27, wherein the output  
12 command is provided by the command-line environment.

13           29. (Previously Added) The method of claim 26, wherein outputting the  
14 result comprises displaying the results on a console.

15           30. (Previously Added) The method of claim 26, wherein outputting the  
16 result comprises importing the results into an application.

17           31. (Previously Added) The method of claim 26, wherein outputting the  
18 result comprises displaying the results in a graphical user interface.

19           32. (Previously Added) The method of claim 26, further comprising  
20 another command configured to provide the at least one object to the output  
21 command.

22           33. (Previously Added) The method of claim 32, wherein the other  
23 command comprises a format command configured to emit display information  
24 associated with the at least one object.  
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1           **34.**   (Previously Added) The method of claim 33, wherein the output  
2 command ignores the display information when outputting the result.

3           **35.**   (Previously Added) The method of claim 34, wherein the other  
4 command comprises a markup command configured to add a property annotation  
5 to a parameter within the at least one object.

6           **36.**   (Previously Added) The method of claim 32, wherein the other  
7 command comprises a convert command configured to convert the at least one  
8 object into a specific format.

9           **37.**   (Previously Added) The method of claim 36, wherein the specific  
10 format comprises an XML document, an Active Directory Object, or a comma  
11 separated value format.